DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES • • • • • • STATE OF FLORIDA
Emmett S. Roberts, Secretary
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DIVISION OF HEALTH

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Wilson T. Sowder, M.D., M.P.H., Director

July 2, 1973

Please note: The applies to St Vincent - some positive tests resulted.

MEMORANDUM

TO: All Concerned

FROM: Gerald L. Hoff, Ph.D. GLH

SUBJECT: Preliminary Report #3 on deer sera collected in 1972 hunting season

I feel that a short explanation is due as to why laboratory results have been so slow in coming on this project. Due to the fact that the Division of Health Laboratory does not run certain of the tests which we need to have done, I have been forced to ask research laboratories to conduct these tests. Because we cannot pay them for the services under our present working system, the tests are conducted at the convenience of the laboratories with no priority assigned to them. This means that I get the results back in pieces or I have to wait until a lab completes everything and sends me the final results. At this time it looks as if we will get everything done except the testing for epizootic hemorrhagic disease (EHD) of deer, since I cannot make arrangements for free testing of the samples.

The present report concerns the arboviruses of Eastern equine encephalitis (EEE), Western equine encephalitis (WEE), Venezuelan equine encephalitis (VEE), and St. Louis encephalitis (SLE). The first three, EEE, WEE, and VEE, are all viruses which are capable of causing morbidity and mortality in equines and man. Vaccination of horses can be accomplished to all three viruses, but at present there are no vaccines for general use in people. It is known that deer and hogs can be infected with all three viruses but to the best of my knowledge, none of these viruses cause mortality in deer or hogs.

The virus of SLE is normally found in birds and can cause illness in man. The role of mammals in the natural history of the virus is unknown, but many studies have found antibodies to the virus in wildlife species including deer.

A total of 39 deer and 10 hogs were tested for antibodies to these agents. Positive reactions were detected in sera from four animals. Two deer from Monroe County reacted against VEE, which is known to be endemic in that part of the state. One hog from Franklin County reacted against EEE, while a deer from the same area reacted to EEE, WEE, and VEE. (See table for explanation).

Results have not been received for another 12 serum samples submitted from Duval County deer.

The above results, although not earth shaking, are interesting in that it helps us evaluate and compare the use of deer killed by hunters as a surveillance system for diseases of human and animal concern with the methods presently employed by the Veterinary Public Health Section. The comparison, to date, has been favorable.

At this time the only test results outstanding are those on the California encephalitis virus complex and on leptospirosis.

GLH:sjs
Enclosure

RESULTS OF TESTING FOR ANTIBODIES TO SELECTED AREOVIRUSES

Area	County	#Tested	#Positive			
			EEE	WEE	VEE	SLE
Wildl Conservation Area 2A	Palm Beach	13	0	0	0	0
Copeland	Collier	2	0	0	0	0
Pinecrest	Monroe	4	0	0	2	0
Avon Park, A.F.B.	Polk	9	0	0	0	0
St. Vincent Island - deer	Franklin	3	1*	1*	1*	0
- hogs		10	1	0	0	0
D-Dot Ranch	Duval	8	0	0	0	0
		49	2	1	3	0

* One deer serum reacted positively to EEE, WEE, VEE. Since these viruses will cross-react with each other, a more confirmatory test has been requested from the U.S.D.A. At present, though, it appears that the deer was infected with EEE and that the reactions to WEE and VEE are merely the result of cross-protection.